

1 **What Is Claimed Is**

2 1. A reclining apparatus for use between a post and a seat of a chair, the
3 reclining apparatus comprising a first joint for attachment to the post,
4 a second joint pivotally connected with the first joint for supporting
5 the seat and a locking device for locking the second joint in one of
6 several reclined positions relative to the casing.

7 2. The reclining apparatus according to claim 1 wherein the locking
8 device includes:

- 9 □ a rod connected with the second joint and movable on the first
10 joint, the rod defines several dents; and
11 □ a latch movable on the first joint between a releasing position
12 where the latch is away from the rod and a locking position where
13 the latch is in one of the dents so as to lock the seat in one of the
14 several reclined positions relative to the post.

15 3. The reclining apparatus according to claim 2 wherein the rod and the
16 latch are movable in transverse directions.

17 4. The reclining apparatus according to claim 2 wherein the locking
18 device includes a mount installed on the first joint, and the rod is
19 movably installed on the mount.

20 5. The reclining apparatus according to claim 2 wherein the locking
21 device includes a handle for maneuvering the latch.

22 6. The reclining apparatus according to claim 5 wherein the locking
23 device includes a linkage connected between the latch and the
24 handle.

25 7. The reclining apparatus according to claim 6 wherein the linkage
26 includes a shaft connected with the latch, and the handle extends

1 transversely from the shaft.

2 8. The reclining apparatus according to claim 7 wherein the linkage
3 includes a V-shaped lever pivotal on the first joint, and the V-shaped
4 lever includes a first end linked to the latch and a second end linked
5 to the shaft.

6 9. The reclining apparatus according to claim 8 wherein the linkage
7 includes a link connected between the shaft and the second end of
8 the V-shaped lever.

9 10. The reclining apparatus according to claim 1 including a pin for
10 pivotally connecting the second joint with the first joint.

11 11. The reclining apparatus according to claim 2 including a pin
12 connected between the second joint and the rod.

13 12. The reclining apparatus according to claim 11 wherein the first joint
14 defines two arched slots for receiving two ends of the pin.

15 13. The reclining apparatus according to claim 1 including a tuning
16 device for tuning the reclined positions of the second joint.

17 14. The reclining apparatus according to claim 13 wherein the tuning
18 device includes at least one spring connected with the second joint, a
19 screw connected with the spring and non-rotationally installed on the
20 first joint and a nut engaged with the screw and rotationally installed
21 on the first joint so that screwing of the nut on the screw causes the
22 pivotal of the second joint relative to the first joint.

23 15. The reclining apparatus according to claim 14 wherein the tuning
24 device includes a worm rotationally installed on the first joint, and
25 the nut is a nut/gear engaged with the screw internally and engaged
26 with the worm externally.

1 16. The reclining apparatus according to claim 15 wherein the tuning
2 device includes a crank extending transversely from the worm.

3 17. The reclining apparatus according to claim 1 wherein the post is a
4 hydraulic cylinder.

5 18. The reclining apparatus according to claim 17 including a lifting
6 device for controlling the hydraulic cylinder.

7 19. The reclining apparatus according to claim 18 wherein the lifting
8 device includes a lever pivotally installed on the first joint, and the
9 lever includes a first end for contact with the hydraulic cylinder and
10 a second end to be maneuvered.

11 20. The reclining apparatus according to claim 19 wherein the lifting
12 device includes a shaft rotationally installed on the lateral walls of
13 the casing and connected with the second end of the lever.

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